IN THE SPECIFICATION

CLEAN COPY

On page 15, please replace the paragraph starting at line 1 with the following clean copy:

Referring now to Figure 3, surface 11, under inspection by an enhanced optical inspection system 20 in accordance with a preferred embodiment of the present invention is depicted. A partially reflective surface 26 is incorporated within optical inspection system 20 producing an optical resonant cavity between partially reflective surface 26 and surface 11 under inspection. The resonance of the cavity is inherently highly non-linear and therefore it is possible to adjust the length of the cavity by varying the position of the partially reflective surface 26 to enhance a filtering effect. The filtering effect filters a reflected field from the surface, based strictly on the height of the surface.

On page 15, please replace the paragraph starting at line 14 with the following clean copy:

Enhanced optical inspection system **20** includes a detector **27**, which is depicted as a CCD array, although other suitable optical

detectors may be used. A lens gathers reflected wavefronts **24A-24C** from surface **11** and images the resolution cell **23** on surface **11** on CCD pixel **22** which averages the light reflected from resolution aperture **23**. Reflected wavefront **24A** represents the entire range of reflections from resolution aperture **23**, while reflected wavefront **24B** depicts a reflection from a roughness area and wavefront **24C** depicts a reflection from defect **15**. Note that in contrast to the illustration in **Figure 1**, reflection **24C** from defect **15** does not overlap reflection **24B** from the roughness area and can therefore be more easily resolved by detector **27**. The multiple reflections set up in the resonant cavity formed by partially reflective surface **26** and surface **11** are highly sensitive to angle, and therefore serve to separate reflections from surface features displaced from each other. Due to the small angular spectrum accepted by the resonant cavity, surface feature reflections will sum in image pixel **22** in a non-coherent manner, causing any interferences to be uncorrelated, significantly decreasing optical noise from surface **11**.

On page 17, please replace the paragraph starting at line 5 with the following clean copy:

Due to the filtering effect and reduction in the field coupling between surface features, defect **15** can be detected as having a height exceeding acceptance threshold **16**, by the techniques of the present invention. Thus, enhanced optical inspection system **20** can achieve results similar to a near-field inspection system, without placing a probe within the near-field region, by filtering out all of acceptable height variations.

On page 10, please replace the paragraph starting at line 1 with the following clean copy:

Referring now to **Figure 6**, details of enhanced optical inspection system **20** are depicted. Illumination subsystem **31** produces a beam **36** that is directed at surface under inspection **11** through partially reflective surface **26A**. Partially reflective surface **26A** produces a Fabry-Perot optical resonant cavity with surface under inspection **11**. At the distance at which partially reflective surface **26A** and surface under inspection **11** form the optimal Fabry-Perot cavity, the sensitivity is greatest, due to the resonance condition of the Fabry-Perot cavity. Detection subsystem **33** provides detection of the reflected beam, permitting measurement of surface height variations. The presence of partially reflective surface **26A** increases the sensitivity of the

interferometer around the resonant distance of the Fabry-Perot cavity formed between the partially reflective surface **26A** and surface under inspection **11**.

It is not believed that this letter requires any fees, but if there are any fees incurred by this communication, please deduct them from our Deposit Account NO. 23-0830.

Respectfully submitted,

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